

Atty's 23063

Pat. App. Not known - US phase of PCT/EP2003/011643

CLAIM AMENDMENTS

1 - 27. (canceled)

1 28. (new) Machine for producing a coffee beverage
2 comprising a coffee powder container device and a fluid supply
3 device to produce a coffee beverage, said devices being recipro-
4 cally mobile, so that when connected together they form an infusion
5 chamber for said coffee powder, characterized by the fact that said
6 container device can be removed from the machine, said container
7 device being connected to a moving mechanism adapted to displace
8 said container device from one position at a certain distance from
9 said supply device to a position adherent to said supply device,
10 said container device presenting first and second means of connec-
11 tion to said moving mechanism, said first means of connection
12 comprising at least one rotating pin and said second means of
13 connection comprising hook-up couplings connected to a slide on
14 said moving mechanism, mobile in relation to said pin, said slide
15 operating a tractive action on said container device to bring the
16 latter in said position adherent to said supply device.

1 29. (new) Machine according to claim 28, characterized
2 in that said rotating pin is fixed and positioned lower than said
3 slide.

1 30. (new) Machine according to claim 28, characterized
2 in that said slide is connected by a sliding motion to a guide that
3 commands at least the angular movement of said container device
4 around said pin.

1 31. (new) Machine according to claim 28 characterized
2 in that said container device comprises at least three telescopic
3 elements connected to each other by means of a sliding action, a
4 first element being set on said rotating pin, a second element
5 being connected in a sliding manner to said first element, and a
6 third element being connected in a sliding manner to said second
7 element and being adapted to house at least one portion of said
8 supply device to form said infusion chamber.

1 32. (new) Machine according to claim 31 characterized
2 in that said second element presents first abutments adapted to
3 collaborate with second elastic abutments of said first element,
4 and during the extension of said container device, said first and
5 second abutments being adapted to command the translation, firstly
6 of said third element in relation to said first and second element,
7 and during the retraction of said container device, the translation
8 firstly of said second and third element in relation to said first
9 element, and then the translation of said third element in relation
10 to said second element.

1 33. (new) Machine according to claim 32 characterized
2 in that it comprises means of expulsion for the waste coffee powder
3 from said container device.

1 34. (new) Machine according to claim 32 characterized
2 in that it comprises at least one blocking element adapted to
3 maintain all the components united in said coffee powder container
4 device when said device is removed from the machine.

1 35. (new) Machine according to claim 32 characterized
2 in that said blocking element comprises a lever hinged to said
3 first telescopic element, said lever presenting a protruding
4 portion inserted inside a tubular portion adapted to house said
5 pin, and moreover, presenting an end bent at right-angles for
6 insertion into aligned holes in said second and third telescopic
7 elements to prevent these elements from extending when said device
8 is removed from said machine.

1 36. (new) Machine according to claim 32 characterized
2 in that it comprises safety means adapted to interrupt machine
3 function in the case of faulty conditions, in particular in the
4 connection between the third tubular element and the lower portion
5 of said fluid supply device.

1 37. (new) Machine according to claim 36 characterized
2 in that said safety means comprise a position detector adapted to
3 read the position of said third telescopic element connected to an
4 electronic control processor adapted to prevent the triggering of a
5 microswitch that commands the water supply to the infusion chamber
6 until said third telescopic element is set in its correct position.

1 38. (new) Machine according to claim 37 characterized
2 in that following a certain time lapse after the connection between
3 said third telescopic element and said supply device, said elec-
4 tronic control processor interrupts the function of said moving
5 mechanism.

1 39. (new) Machine according to claim 32 characterized
2 in that hook-up teeth are foreseen attached through a spring to
3 unite said container device with said machine, these teeth being
4 able to be attached to and released from their respective holes
5 through a reciprocal inward and outward motion.

1 40. (new) Machine according to claim 39 characterized
2 in that said hook-up teeth are enlarged at a certain point to
3 prevent micro-switch activation of machine function in the case of
4 partial or incorrect connection between said container device and
5 said machine.

1 41. (new) Machine for producing a coffee beverage
2 according to claim 32 characterized in that it comprises an inter-
3 ception tap for fluid or water on exit from the machine in the form
4 of a hollow body having at least a first and second communicating
5 space with the exterior and equipped with a piston connected in
6 sliding mode internally, forming together with said body at least
7 four chambers inside which steam or liquid can be passed alterna-
8 tively.

1 42. (new) Machine according to claim 41 characterized
2 in that when turned to one of its configurations, said tap is
3 adapted to activate or deactivate one or more microswitches that
4 control the switch-on or switch-off of a water supply pump to the
5 boiler and/or the switch-on or switch-off of the electric resistors
6 /elements in the boiler.

1 43. (new) Machine according to claim 41 characterized
2 in that three chambers of said tap are formed by grooves in said
3 piston and a fourth chamber presents a variable volume, and is
4 formed between the crown of said hollow body and the crown of said
5 piston.

1 44. (new) Machine according to claim 41 characterized
2 in that a first chamber of said four chambers is connected to a
3 duct that opens onto the crown of said piston, a second chamber is
4 closed, a third chamber is connected to a duct that opens onto the
5 exterior of said tap, and said fourth chamber is connected to a
6 supply space for water or steam on exit from the machine.

1 45. (new) Machine according to claim 41 characterized
2 in that said first space is realized on a side portion of said
3 body, and said second space is realized on said crown of said
4 hollow body.

1 46. (new) Machine for producing a coffee beverage
2 according to claim 32 comprising a coffee powder container device
3 and a fluid supply device to produce a coffee beverage being
4 reciprocally mobile so that when united together, they form an
5 infusion chamber for said coffee powder, characterized in that said
6 fluid supply device is connected to said heated boiler so that the
7 heat dispersed by said boiler heats said fluid supply device.

1 47. (new) Machine according to claim 32 characterized
2 in that the boiler and the supply device are in contact with each
3 other and the heat is transmitted by conduction to guarantee
4 appropriate heating of said supply device.

1 48. (new) Method according to claim 47 characterized in
2 that at least one portion of a container device is connected to
3 said supply device during the periods when the machine is idle, so
4 that said container device is also heated by said boiler.

1 49. (new) Method according to claim 47 characterized in
2 that said container device is automatically connected to said
3 supply device after a pre-established time lapse following the
4 preparation of the last previous coffee beverage.